

FÉDÉRATION EUROPÉENNE DES GÉOLOGUES EUROPEAN FEDERATION OF GEOLOGISTS FEDERACIÓN EUROPEA DE GEÓLOGOS

CONDOLENCE MESSAGE | BRUSSELS | 14 MARCH 2023

Geological profession – Responsible and Hazardous Profession

Intelligere, tuerinoscendas – To understand, to identify and to protect.

On 9 March 2023, three Spanish geologists, two of them postgraduate students, died during field work in a mine in Súria. The European Federation of Geologists (EFG) expresses its condolences to the families of the deceased geologists and to the Ilustre Colegio Oficial de Geólogos (ICOG), the Spanish Association of Professional Geologists.

The geological profession offers many exciting, beautiful, adventurous, and rewarding possibilities in a person's career. At the same time, it also brings peril to geologists that are not often discussed. We, geologists are always at the forefront of exploration to sustain and improve societal quality of life and are, as such, occasionally facing severe injury risks, occasionally resulting in deaths.

According to Marjorie D. Cantineⁱ, "fieldwork is a common element of geological research and education, and it involves many types of risk and reward. This study introduces a database of historical deaths during geological fieldwork to understand the causes of death, the most extreme consequence of physical risk, in the field. Most deaths in the field are unintentional. The database shows that vehicles and environmental risks from terrain, climate, and animals cause most unintentional deaths in the field. Most intentional deaths in the field result from conflict between geologists and community members, often related to land rights or political strife." The deaths recorded in this study included US based deaths between 2000 and 2021.

Geologists face hazards that vary depending on the sector in which they operate, such as construction sites, mines, or oil and gas fields, which are generally considered high-risk environments, as evidenced by a high fatality rate. For example, according to the United States Bureau of Labor Statistics (BLS, 2021)ⁱⁱ, workers in the construction and extractive industries had a mortality rate of 12.3 per 100,000 workers in 2021 while the average is 3.6, among the highest of any other occupational group, just slightly lower than Transportation and material moving Industry. Based on BLS statistics mortality rate rises to 21.6% for underground mining operatorsⁱⁱⁱ.

In general, geological fieldwork poses risks that are similar to those faced by visitors of national parks, suggesting that remote natural landscapes share intrinsic characteristics that pose comparable physical dangers to both groups¹.

Losing a life is always tragic and sad. Losing a fellow expert touches the whole profession to its deepest feelings and brings out the call to help in the best possible way. In cooperation with ICOG, EFG is committed to do its best to help the families of deceased geologists.

The whole community of professional geologists in Europe and abroad shares consolation and griefs due to this recent tragic event.

EFG Board & Secretariat

In the name of European professional geologists.

About EFG: The European Federation of Geologists is a non-governmental organisation that was established in 1980 and includes today 28 national association members. EFG is a professional organisation whose main aims are to contribute to a safer and more sustainable use of the natural environment, to protect and inform the public and to promote a more responsible exploitation of natural resources. EFG's members are National Associations whose principal objectives are based on similar aims. The guidelines to achieve these aims are the promotion of excellence in the application of geology and the creation of public awareness of the



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importance of geoscience for the wellbeing of society.

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ⁱCantine, M.D. (2021). Dying to know: Death during geological fieldwork. TSR, Vol. 19, No. 3, p. 5–14, September 2021. doi: 10.2110/sedred.2021.3.2

ⁱⁱBureau of Labor Statistics (2021). Census of Fatal Occupational Injuries: 2021. <u>https://www.bls.gov/iif/fatal-injuries-tables.htm</u> ⁱⁱⁱBureau of Labor Statistics (2021). Economic News Release: <u>https://www.bls.gov/news.release/cfoi.t04.htm</u>